

Cat. No. 15-1981

OWNER'S MANUAL

Please read before using this equipment.

**181-CHANNEL REMOTE CONTROL
CABLE CONVERTER**

with Volume Control



RadioShack®

INTRODUCTION

Your RadioShack 181-Channel Remote Control Cable Converter lets you connect a non-cable-ready video product to cable. It is compatible with all cable systems and gives you complete remote control selection of all cable channels (VHF, Mid-Band, Super-Band, and Hyper-Band). The converter's volume control lets you adjust a connected TV's sound. You can also use the converter's remote control to turn on or off and fine tune most TVs.

Important Note: This cable converter does not decode "scrambled" premium channels. You can, however, use it with the cable box provided by the cable company so you can receive premium channels and still have remote control of all other channels.

Note to Cable TV System Installer:

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground be connected to the grounding system of the building as close to cable entry as practical.

Note: You need two AAA batteries and a 75-ohm coaxial cable to operate your converter. You might also need extra coaxial cable, an A/B switch, a two-way splitter, and (if your TV has only 300-ohm terminals) a 75-to-300 ohm transformer. Read the entire "Connecting the Converter" section of

this Owner's Manual before you begin to install your converter.

WARNING: To reduce the risk of fire or shock hazard, do not expose this product to rain or moisture.

	CAUTION RISK OF ELECTRIC SHOCK. DO NOT OPEN.	
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER OR BACK. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.		



This symbol is intended to alert you to the presence of uninsulated dangerous voltage within the product's enclosure that might be of sufficient magnitude to constitute a risk of electric shock. Do not open the product's case.



This symbol is intended to inform you that important operating and maintenance instructions are included in the literature accompanying this product.

The graphical symbols with supplemental markings are located on the back of the product.

We recommend you record your converter's serial number here. The number is on the bottom of the converter.

Serial Number _____

© 1999 Tandy Corporation.
All Rights Reserved.

RadioShack is a registered trademark used by Tandy Corporation.

CONTENTS

Preparation	4
Setting CH4/CH3	4
Choosing the Cable System Type	4
Connecting the Converter to AC Power	5
Turning the Converter On/Off	5
Using the Switched AC Outlet	6
Connecting the Converter	7
Connecting to a TV	7
Connecting to Cable	7
Single-Wire Cable System	8
Two-Wire Cable System	9
Connecting to a VCR	10
Recording and Viewing a Non-Premium Cable Channel	10
Recording and Viewing a Premium Cable Channel	11
Operation	12
Operating the Converter's Receiver	12
Using the Remote Control	13
Remote Control TVs	14
Adjusting the Volume	14
Muting the Sound	14
Storing a Channel in Memory	14
Setting the Sleep Timer	15
Using Parental Lock (PL)	15
Locking a Channel	15
Watching a Locked Channel	15
Unlocking a Channel	16
Changing the Security Code	16
Resetting the Security Code	16
Variations in Channel Numbering	17
Care and Maintenance	19
The FCC Wants You to Know	20
Specifications	21

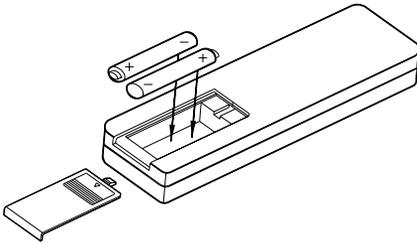
PREPARATION

Your converter's remote control requires two AAA batteries (not supplied) for power. For the best performance and longest life, we recommend RadioShack alkaline batteries.

Cautions:

- Use only fresh batteries of the required size and recommended type.
- Do not mix old and new batteries, different types of batteries (standard, alkaline, or rechargeable), or rechargeable batteries of different capacities.

Follow these steps to install batteries.



1. Slide the battery compartment cover in the direction of the arrow to remove it.
2. Place the batteries in the compartment as indicated by the polarity symbols (+ and -) marked inside.
3. Replace the cover.

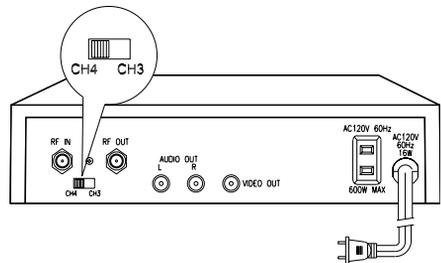
When the remote control stops operating properly, replace the batteries.

Warning: Dispose of old batteries promptly and properly. Do not burn or bury them.

Caution: If you do not plan to use the remote control for a month or more, remove the batteries. Batteries can leak chemicals that can destroy electronic parts.

SETTING CH4/CH3

Set your TV's tuner to Channel 3 or 4 (whichever is not used for broadcasts in your area). Then set **CH4/CH3** on the back of the converter to match the channel you selected on your TV's tuner.



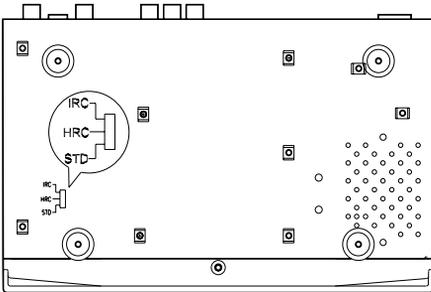
CHOOSING THE CABLE SYSTEM TYPE

There are three types of cable TV channel frequency systems: standard, IRC, and HRC. Most cable systems use a standard system. Your converter is preset to use a standard channel frequency system.

Caution: To avoid damaging your converter, make sure your converter is not connected to an AC outlet before setting IRC/HRC/STD.

Note: If you are not sure what type of channel frequency system your cable system uses, contact your local cable company.

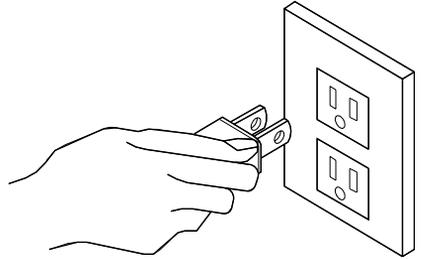
If the cable system in your area is not standard, use a paper clip or other pointed object to set IRC/HRC/STD on the bottom of the converter for the type of cable system you have.



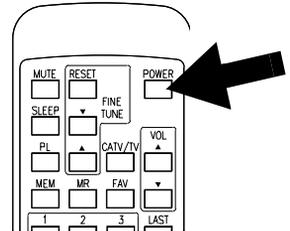
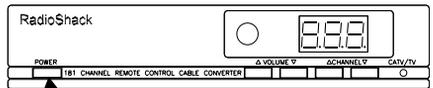
Note: HRC and IRC are methods used by some cable companies for converting satellite and local broadcast channels to cable channels. Channels 5 and 6 on IRC systems and all channels on HRC systems are slightly different frequencies from those used on standard systems.

CONNECTING THE CONVERTER TO AC POWER

Plug the converter's power cord into a standard AC outlet.



TURNING THE CONVERTER ON/OFF



To turn the converter on or off, press **POWER** on the front of the converter or on the remote control.

USING THE SWITCHED AC OUTLET

The converter's built-in switched AC outlet lets you connect a TV or another electronic device that uses 120V, 60Hz power (up to 600 watts) directly to the converter.

Press **POWER** on the converter or remote control to turn on the converter and the outlet. Press **POWER** again to turn them off.

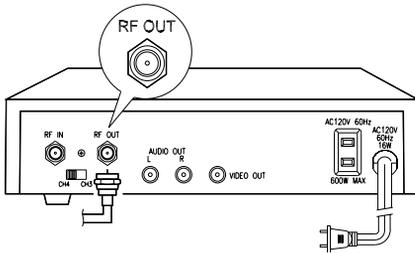
Notes:

- If a TV you plugged into the switched AC outlet has an instant-on feature, it might go into a standby mode when you turn on the converter. If this happens, you might have to turn on your TV using its power switch or remote control.
- If you plugged a digital TV into the switched AC outlet, it might automatically reset to a channel other than 3 or 4 when you turn off the converter. If this happens, you might want to plug it into a standard AC outlet and turn it on and off manually.

CONNECTING THE CONVERTER

CONNECTING TO A TV

Use the supplied 75-ohm coaxial cable with F-type connectors to connect the 75-ohm terminal on your TV to the **RF OUT** terminal on the back of the converter. If your TV has only 300-ohm terminals, use a 75-to-300 ohm transformer (not supplied), available from your local RadioShack store.



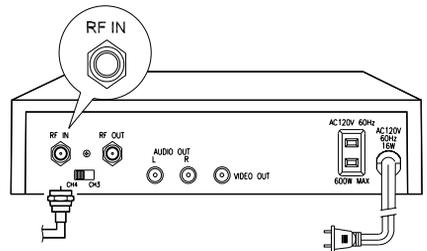
CONNECTING TO CABLE

How you connect your converter depends on the complexity of your video system. Refer to the connection examples on the next few pages to find the one that is most similar to your system.

Notes:

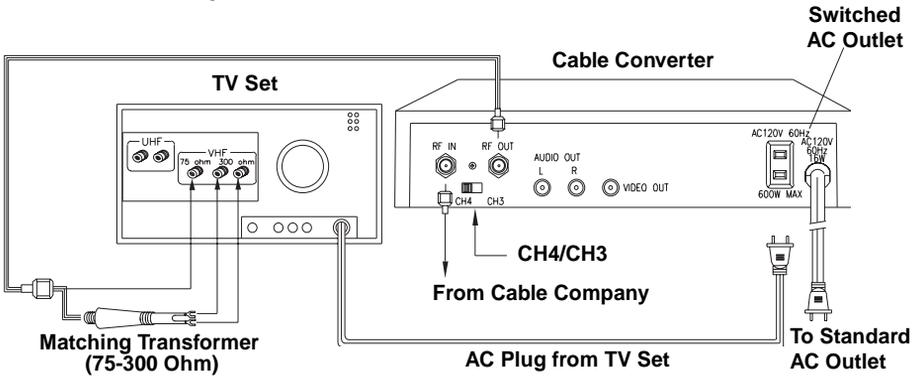
- Your system might use a combination of two or more of the following examples. If you have questions, take a diagram of your system to your local RadioShack store for assistance.
- Check local regulations before connecting any device to your cable system.

Connect the cable company's coaxial cable to the **RF IN** terminal on the back of the converter.

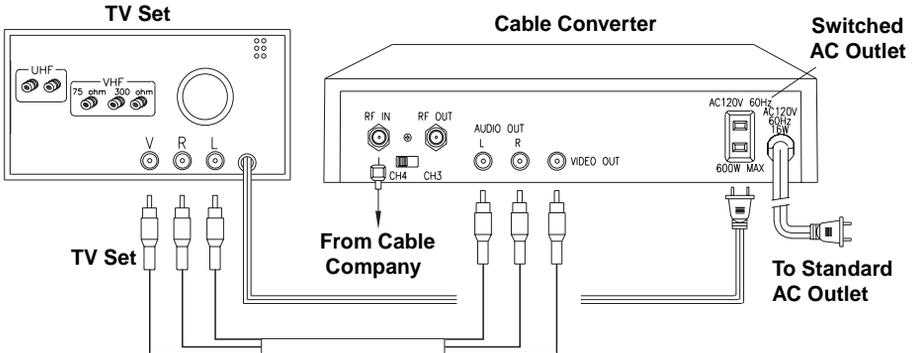


Single-Wire Cable System

Connect to TV R/F Inputs

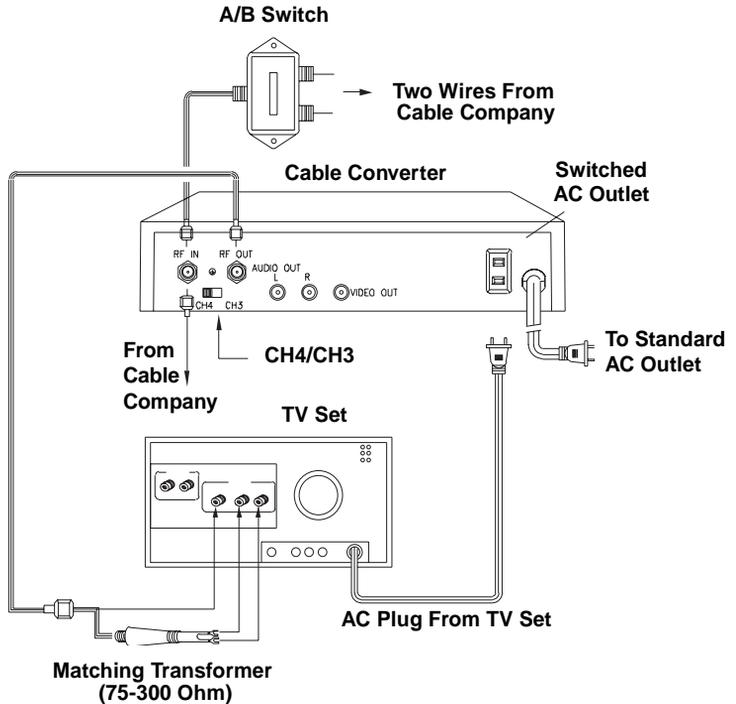


Connect to TV Audio/Video Inputs



Two-Wire Cable System

Some cable systems offer more than 181 channels and include two incoming wires. To use your converter with such a system, install an A/B switch (not supplied), available from your local RadioShack store, to connect the cable company's wires to the converter.

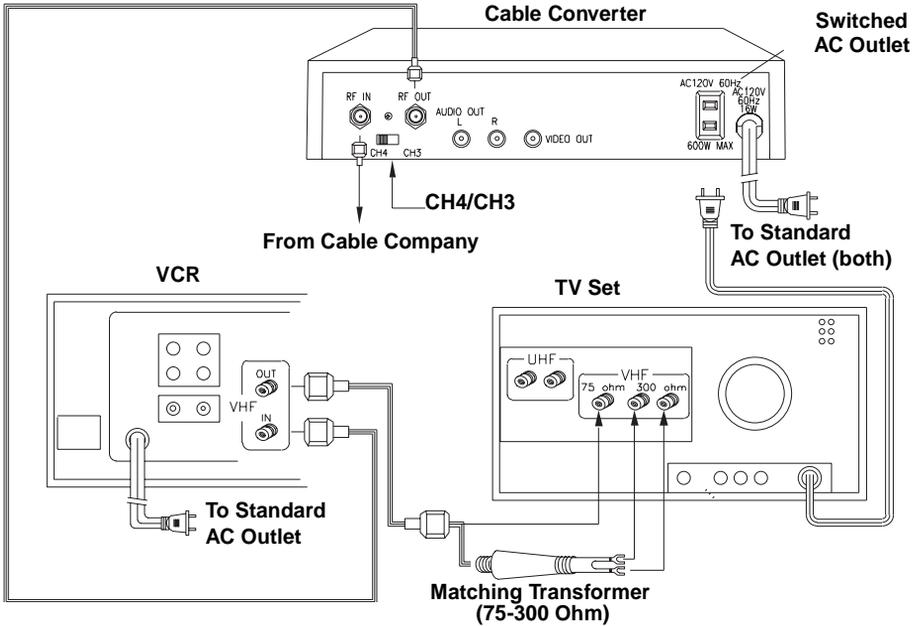


Use the A/B switch to select the group of channels you want to watch.

CONNECTING TO A VCR

Recording and Viewing a Non-Premium Cable Channel

This connection lets you record a non-premium cable channel while you view it.

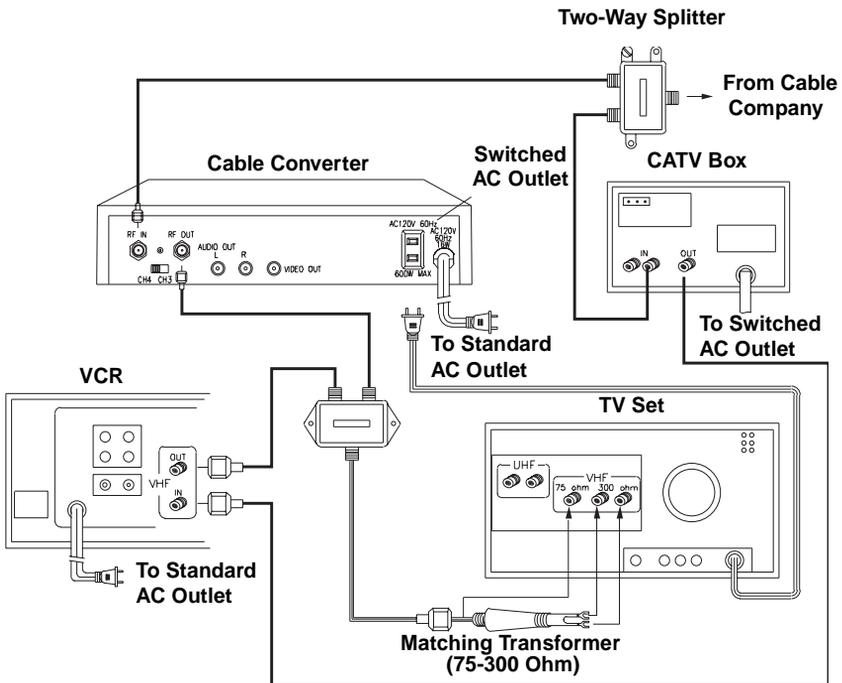


Recording and Viewing a Premium Cable Channel

This connection lets you:

- record a premium or non-premium cable channel while you view it
- record a premium cable channel while you view a non-premium cable channel
- record a non-premium cable channel while you view another non-premium cable channel

Use an A/B switch (not supplied) to connect your TV set to the VCR and the cable converter. Use a two-way splitter (not supplied) to connect the cable company's wire to the converter and the cable company's CATV box. Your local RadioShack store has the accessories you need to make this connection.



With the A/B switch set to the converter position, you have remote control of all cable channels, except premium cable channels.

When you want to view premium channels, set the A/B switch to the position for CATV. Then follow the instructions in the VCR's owner's manual to set the channel switches on the VCR and CATV box.

OPERATION

OPERATING THE CONVERTER'S RECEIVER

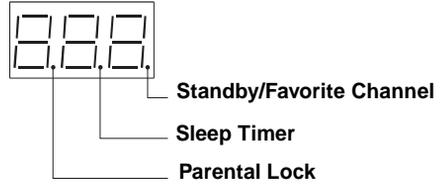
Press **POWER** on the converter or remote control to turn the converter and the switched AC outlet on and off. When you turn off the converter, a dot appears on the lower right corner of the display to indicate that the converter is in standby mode.

Press **CHANNEL ▲** or **▼** on the converter to select individual channels, or hold down **CHANNEL ▲** or **▼** to scan channels in the direction of the arrow. The selected channel appears on the display.

Press **VOLUME ▲** on the converter or **VOL ▲** on the remote control to increase the volume, or press **VOLUME ▼** on the converter or **VOL ▼** on the remote control to decrease it.

Press **CATV/TV** to select either the CATV or TV mode. In TV mode, **TV** (TV) appears before the channel number on the display.

Sample Display Indications



- **125** — CATV Channel 125.
- **TV16** — TV Channel 16.
- **TV52.** — TV Channel 52 is a favorite channel.
- **11.5** — CATV Channel 115 is receiving a program and the sleep timer has been set up.
- **1.2.5.** — CATV Channel 125 is locked and it is also a favorite channel. The sleep timer has been set up.
- **CC** — Press **MEM** or **FAV** to start a memory operation.
- **U•U** — Press **PL** to activate parental lock.
- **U.1** — the 1st digit of a parental control code.
- **U.2** — the 2nd digit of a parental control code.
- **U.3** — the 3rd digit of a parental control code.
- **CC** — Press **FINE TUNE ▲** to confirm your entry, or store a programmed function in memory.
- **DD** — Press **FINE TUNE ▼** to confirm your entry, or erase a programmed function from memory.

USING THE REMOTE CONTROL

The remote control lets you operate your converter from across the room. For the most dependable operation, point the remote control toward the converter's display.

Here is a description of each of the remote control's keys:

MUTE — press to temporarily turn off sound. To restore sound, press **MUTE** again.

SLEEP — lets you set your converter to automatically turn off after the pre-set time.

FINE TUNE ▲/▼ — press to receive the best possible reception or confirm the entry of **MEM**, **FAV**, and **PL**.

PL (Parental Lock) — use with **FINE TUNE ▲** to lock channels.

MEM — use with **FINE TUNE ▲** to store a channel you previously fine-tuned.

MR (Memory Recall) — press to tune to your favorite channel stored in memory.

Number Buttons (0–9) — press to directly select channels. Precede single-digit channels with a **0** (02, 03, 04, and so on).

RESET (Fine Tuning Center) — press to return to the default setting.

POWER — press to turn the converter and the switched AC outlet on and off.

CATV/TV — press to select CATV or TV mode.

VOL ▲/▼ — press **▲** to increase volume or **▼** to decrease it.

FAV — use with **FINE TUNE ▲** to store a favorite channel or with **FINE TUNE ▼** to delete it.

LAST (Last Channel Recall) — press to recall the channel you selected before the current channel.

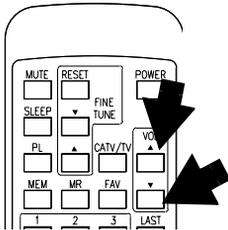
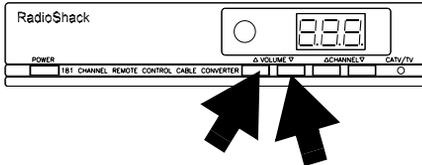
CH ▲/▼ — press to select individual channels or scan channels in the direction of the arrow. The converter's display shows the channel number.

Remote Control TVs

If your TV has a remote control and your converter's remote control interferes with the TV's operation, either turn off the TV's remote control feature (if the TV has a remote control on/off switch) or cover the TV's remote control receiver window (with a piece of black tape, for example).

ADJUSTING THE VOLUME

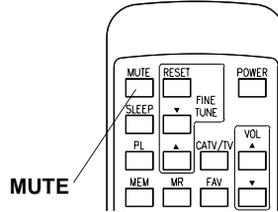
Repeatedly press **VOLUME ▲** or **▼** on the converter or **VOL ▲** or **▼** on the remote control to adjust the volume.



MUTING THE SOUND

Press **MUTE** on the remote control to temporarily turn off the sound. To re-

store the sound, press **MUTE** again or repeatedly press **VOLUME ▲** or **▼** on the converter or **VOL ▲** or **▼** on the remote control.



STORING A CHANNEL IN MEMORY

Follow these steps to store a favorite channel in memory.

1. Repeatedly press **CHANNEL ▲** or **▼** on the converter or **CH ▲** or **▼** on the remote control to select the channel.
2. Press **FAV**.
3. Press **FINE TUNE ▲**. A dot appears on the lower right corner of the display.

To select the channel currently stored in memory, press **MR**.

To remove a stored channel from memory, repeatedly press **CHANNEL ▲** or **▼** on the converter or **CH ▲** or **▼** on the remote control to select it, press **FAV**, then press **FINE TUNE ▼**. The channel is deleted from memory and the dot disappears from the display.

SETTING THE SLEEP TIMER

Follow these steps to set the converter to automatically turn off after a certain length of time (90, 60, or 30 minutes).

1. Press **SLEEP**. **9.0** appears and the sleep timer indicator lights.
2. Repeatedly press **SLEEP** until the desired length of time appears.

When the preset time is reached, **00** appears and the converter automatically turns off.

Notes:

- To see the remaining time on the timer, press **SLEEP** once.
- To turn off the timer, repeatedly press **SLEEP** until **00** appears. The sleep timer indicator disappears and the converter stays on until you turn it off.

USING PARENTAL LOCK (PL)

To prevent children from viewing adult programs (for example), you can lock channels you select then set the converter so it does not tune them.

Note: Your converter's security code is preset to 2999, but you can change it (see "Changing the Security Code" on Page 16).

Locking a Channel

1. Repeatedly press **CH ▲** or **▼** on the remote control to select the channel you want to lock.
2. Press **PL**. **00** appears.
3. Hold down **FINE TUNE ▲** to lock the selected channel. **C.C** appears to confirm the entry.
4. Release **FINE TUNE ▲**. **0.0** appears to indicate the channel is locked.

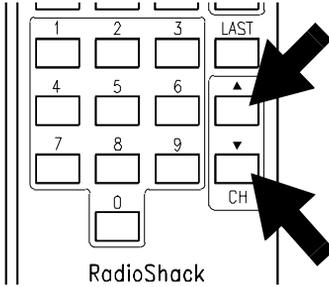
Watching a Locked Channel

1. Repeatedly press **CH ▲** or **▼** on the remote control to select the locked channel you want to watch.
2. Press **PL** then use the number keys on the remote control to enter the security code (preset to 2999). **0.1**, **0.2**, and **0.3** appear for about two seconds, then the converter unlocks all channels.

To re-lock all channels, turn the converter off then turn it back on again.

Unlocking a Channel

1. Repeatedly press **CH** ▲ or ▼ on the remote control to select the desired locked channel.



2. Press **PL**, then use the number keys on the remote control to enter the security code. The converter unlocks the channel.
3. Press **PL**. $\cup\cup$ appears. Then hold down **FINE TUNE** ▼ to unlock the selected channel. $\supset\supset$ appears to confirm the entry. The converter deletes the lock.

CHANGING THE SECURITY CODE

1. Repeatedly press **CH** ▲ or ▼ on the remote control to select a locked channel.
2. Press **PL** then use the number keys on the remote control to enter the current 4-digit security code (preset to 2999).
3. Press **PL** then use the number keys on the remote control to enter a new 4-digit security code.
4. Press **FINE TUNE** ▲ .

RESETTING THE SECURITY CODE

1. Follow Steps 1 and 2 under "Unlocking a Channel."
2. Press **PL**, then use the number keys on the remote control to enter **71269** (your converter's default master code) within 3 seconds. The converter resets the security code to 2999.

VARIATIONS IN CHANNEL NUMBERING

Some cable companies use a channel numbering system that is different from the one used by your converter. For example, the channel your cable company calls 21 might appear as **18** on the converter's display.

Use the supplied channel number labels to mark the cable company's channel numbers that differ from the channels on the converter's display. Then peel off the backing on each label and paste the large label on the converter and the small label on your remote control.

This table compares channels that your converter shows to channel numbers that might be assigned by your local cable company.

Indicator	Cable Channel
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11

Indicator	Cable Channel
12	12
13	13
14	A
15	B
16	C
17	D
18	E
19	F
20	G
21	H
22	I
23	J
24	K
25	L
26	M
27	N
28	O
29	P
30	Q
31	R
32	S
33	T
34	U
35	V
36	W
37	AA or W+1
38	BB or W+2
39	CC or W+3
40	DD or W+4

Indicator	Cable Channel
41	EE or W+5
42	FF or W+6
43	GG or W+7
44	HH or W+8
45	II or W+9
46	JJ or W+10
47	KK or W+11
48	LL or W+12
49	MM or W+13
50	NN or W+14
51	OO or W+15
52	PP or W+16
53	QQ or W+17
54	A6 or W+18
55	A7 or W+19
56	A8 or W+20
57	A5 or W+21
58	A4 or W+22
59	A3 or W+23
60	A2 or W+24
61	A1 or W+25
62	RR or W+26
63	SS or W+27
64	TT or W+28
65	UU or W+29
66	VV or W+30
67	WW or W+31
68	XX or W+32
69	YY or W+33

Indicator	Cable Channel
70	ZZ or W+34
71	AAA or W+35
72	BBB or W+36
73	CCC or W+37
74	DDD or W+38
75	EEE or W+39
76	FFF or W+40
77	GGG or W+41
78	HHH or W+42
79	III or W+43
80	JJJ or W+44
81	KKK or W+45
82	LLL or W+46
83	MMM or W+47
84	NNN or W+48
85	OOO or W+49
86	PPP or W+50
87	QQQ or W+51
88	RRR or W+52
89	SSS or W+53
90	TTT or W+54
91	UUU or W+55
92	VVV or W+56
93	WWW or W+57
94	XXX or W+58
95	A-5
96	A-4
97	A-3
98	A-2

Indicator	Cable Channel
99	A-1
100	YYY or W+59
101	ZZZ or W+60
102	W+61
103	W+62
104	W+63
105	W+64
106	W+65
107	W+66
108	W+67
109	W+68
110	W+69
111	W+70
112	W+71
113	W+72
114	W+73
115	w+74
116	w+75
117	w+76
118	w+77
119	w+78
120	w+79
121	w+80
122	w+81
123	w+82
124	w+83
125	w+84

CARE AND MAINTENANCE

Your RadioShack 181-Channel Remote Control Cable Converter is an example of superior design and craftsmanship. The following suggestions will help you care for your converter so you can enjoy it for years.



Keep the converter dry. If it gets wet, wipe it dry immediately. Liquids might contain minerals that can corrode the electronic circuits.



Use and store the converter only in normal temperature environments. Temperature extremes can shorten the life of electronic devices, damage batteries, and distort or melt plastic parts.



Keep the converter away from dust and dirt, which can cause premature wear of parts.



Handle the converter gently and carefully. Dropping it can damage circuit boards and cases and can cause the converter to work improperly.



Use only fresh batteries of the required size and recommended type. Batteries can leak chemicals that damage your converter's electronic parts.



Wipe the converter with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the converter.

Modifying or tampering with the converter's internal components can cause a malfunction and might invalidate its warranty and void your FCC authorization to operate it. If your converter is not performing as it should, take it to your local RadioShack store for assistance.

THE FCC WANTS YOU TO KNOW

Your converter might cause TV or radio interference even when it is operating properly. To determine whether your converter is causing the interference, turn off your converter. If the interference goes away, your converter is causing it. Try to eliminate the interference by:

- moving your converter away from the receiver
- connecting your converter to an outlet that is on a different electrical circuit from the receiver
- contacting your local RadioShack store for help

If you cannot eliminate the interference, the FCC requires that you stop using your converter.

SPECIFICATIONS

REMOTE CONTROL

Range	8m (26 feet)/30° Angle
Power Source	Two 1.5 Volt (AAA) Batteries
Dimensions (HWD)	$5\frac{5}{8} \times 2 \times 6\frac{7}{8}$ Inches (16 × 50 × 175 mm)
Weight (with Batteries)	3 oz (81 grams)

CONVERTER

RF

Input Bandwidth	54–806 MHz
Output Channel	3 or 4
Input/Output Impedance	75 ohms
Noise Figure	15 dB Max.
Max. Cross Modulation	-57 dB (70 Ch. In, each at +12 dB μ V)
Fine-Tuning Range	± 4 MHz in 62.5 kHz Steps
Frequency Stability	± 250 kHz
Output Level	66 dB μ V (typical) 66 dB μ V ± 3 (range)
Video Carrier Center Frequency Accuracy	± 100 kHz Max.
Sound Carrier Center Frequency Accuracy	4.5 MHz ± 0.007 MHz
P/S Ratio	16 ± 3 dB
Local Oscillator Leakage	-10 dBmV Max. at input

Video and Audio

Video Output	1 Vp-p
Video Output Impedance	75 ohms
Audio Output	1 Vp-p
Audio Output Impedance	600 ohms
Power Consumption	16 Watts at 120 Volts AC 60 Hz
Dimensions (HWD)	$2 \times 9\frac{5}{8} \times 6$ Inches (50 × 246 × 152 mm)
Weight	2.8 lb (1.27 kg)

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.

NOTES



Limited Ninety-Day Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for ninety (90) days from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow the limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

RadioShack Customer Relations, Dept. W, 100 Throckmorton St., Suite 600, Fort Worth, TX 76102

We Service What We Sell

3/97

RadioShack
A Division of Tandy Corporation
Fort Worth, Texas 76102